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7. (Currently Amended) A semiconductor optical device comprising:

a semiconductor substrate;

a stacked body formed at least by a cladding layer having a first conductivity, an active region formed by an active layer or a photoabsorption layer and a cladding layer having a second conductivity, said stacked body being provided on said semiconductor substrate and formed like a mesa stripe;

wherein both sides of said stacked body are buried by a burying layer formed at least by a semi-insulating semiconductor crystal;

the width of said active region is smaller than any of the width of said cladding layers having said first conductivity and the width of said cladding layer having said second conductivity ~~of said stacked body~~; and

a Ru-doped semi-insulating layer is provided in a space between said burying layer and said active region in both sides of said active region.

8. (Original) The semiconductor optical device as claimed in claim 7, wherein said Ru-doped semi-insulating layer is Ru-doped InP formed by using mass transport.

9. (Currently Amended) The semiconductor optical device as claimed in claim 7, wherein a Ru-doped semi-insulating layer is provided as said burying layer by epitaxial growth method such that said Ru-doped semi-insulating layer provided as said burying layer covers said Ru-doped semi-insulating layer provided in said space.

10. (Original) The semiconductor optical device as claimed in claim 9, wherein composition of said Ru-doped semi-insulating layer provided by said epitaxial growth method is Ru-doped InP or Ru-doped InAlAs or Ru-doped InGaAlAs.